

Abstract

Processes for enriching acid gases for sulphur plant feeds and for producing a commercially valuable CO₂ by-product include a sour gas stream contacting an
5 absorbent in an absorber, and regenerating the absorbent to produce a regenerated absorbent and an acid gas stream. A portion of the acid gas stream is recycled to produce higher ratios of hydrogen sulphide to carbon dioxide. Multiple absorbers and recycle streams can be used.